



Regional CHP Application Centers

Southeast CHP Initiative

January 9th, 2004

Ted Bronson, Power Equipment Associates

Overview

- **RAC Origins**
- **Pilot Program Success – the Midwest CHP Application Center**
- **Solicitation – Goals and Scope of Work**
- **The Awardees**
 - Mid-Atlantic -Northeast -Northwest
 - Intermountain -Pacific
- **Possibilities in the Southeast**



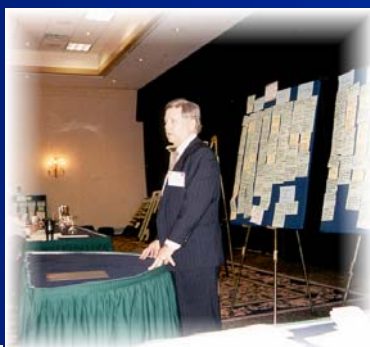
ORIGINS – RACs

- **BCHP Working Group**
 - USDOE, ORNL, Utilities, R&D Organizations
 - 1999 Consensus Roadmap
- **US DOE / EPA CHP Challenge ('98)**
- **2000 CHP Roadmap**
- **Selection of UIC's ERC as Pilot RAC (2001)**
- **Initial Scope:**
 - Education and Outreach
 - Project Support





BCHP Working Group



U.S. DOE CHP Vision and Technology Roadmap

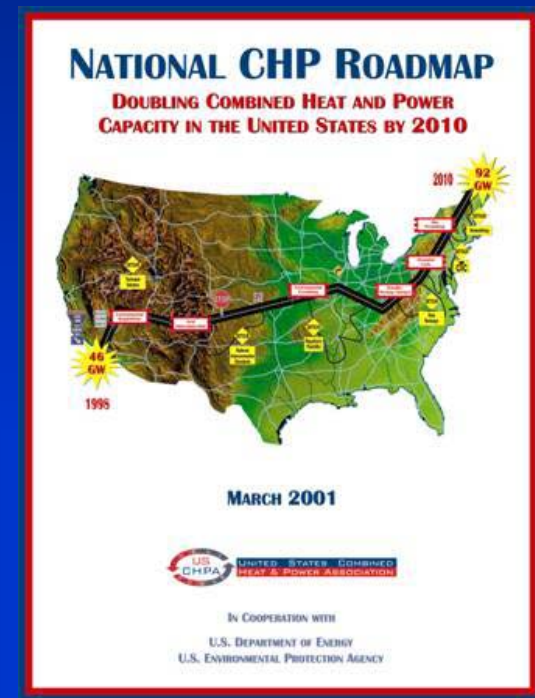
By 2010, **double** the amount of CHP capacity in the United States

1998, 46GW



2010, 92GW

Our CHP activities are guided by the actions identified in the National CHP Roadmap as those items required of us to meet the CHP Goal



- Raise CHP Awareness
- Eliminate Regulatory and Institutional Barriers
- Develop CHP Markets and Technologies

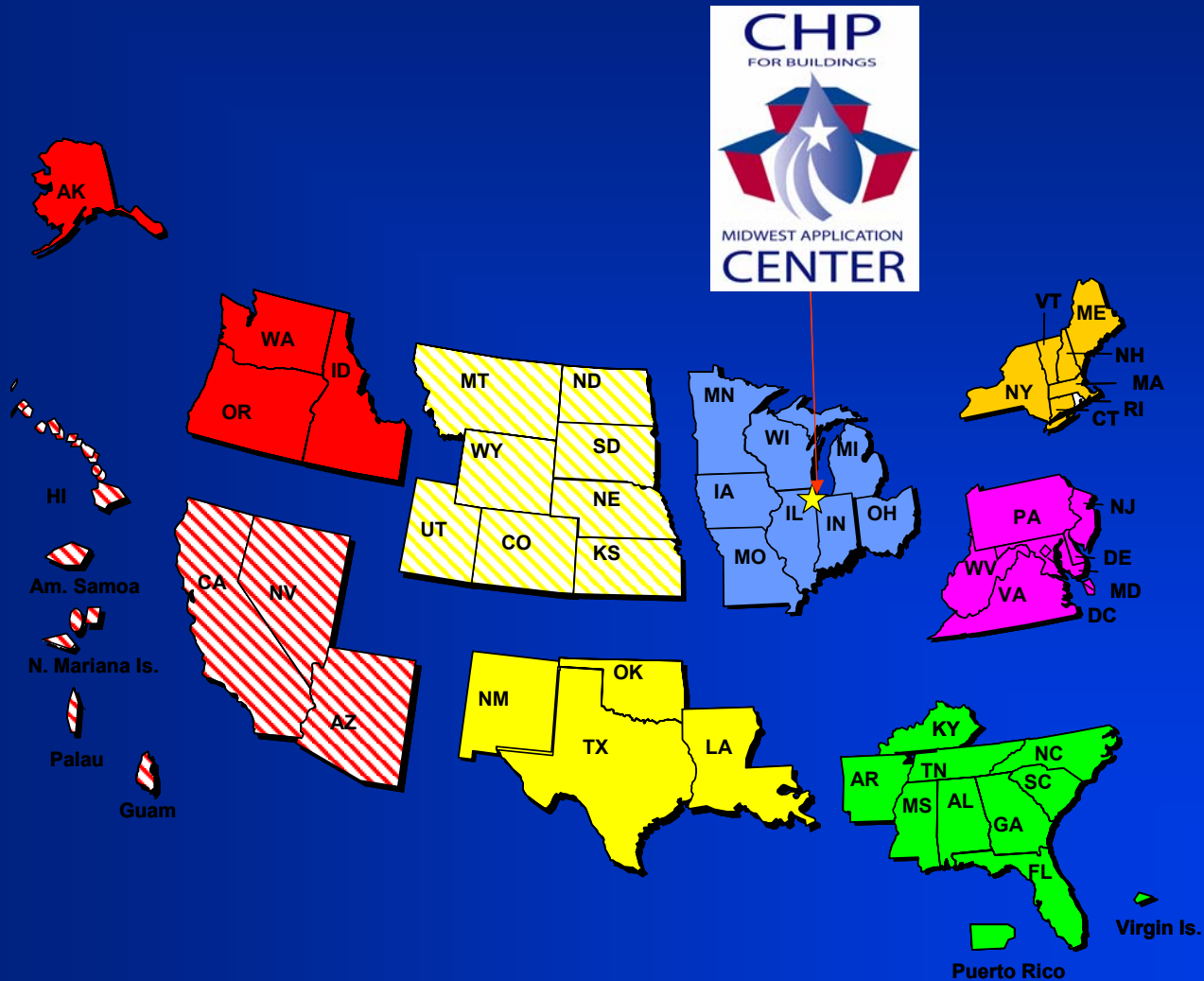


Pilot Regional CHP Application Center

- **Intent of Pilot CHP RAC to facilitate deployment of CHP technologies (Double CHP in the Region) thru:**
 - **Educating regional players on benefits of CHP technologies, while reducing perceived risks**
 - **Providing project specific support**
 - **Providing feedback to DOE and industry regarding future R&D program needs**
 - **Establishing protocols and methods for future centers**



2000 CHP ROADMAP



Midwest CHP Application Center

(Established In March, 2001)

- **Partnership Between:**
 - Univ. of Illinois @ Chicago Energy Resources Center (UIC/ERC) and Gas Technology Institute (GTI)
- **Primary Subcontractors:**
 - Avalon Consulting ---Website & Data Bases
 - PEA --- Midwest CHP Initiative

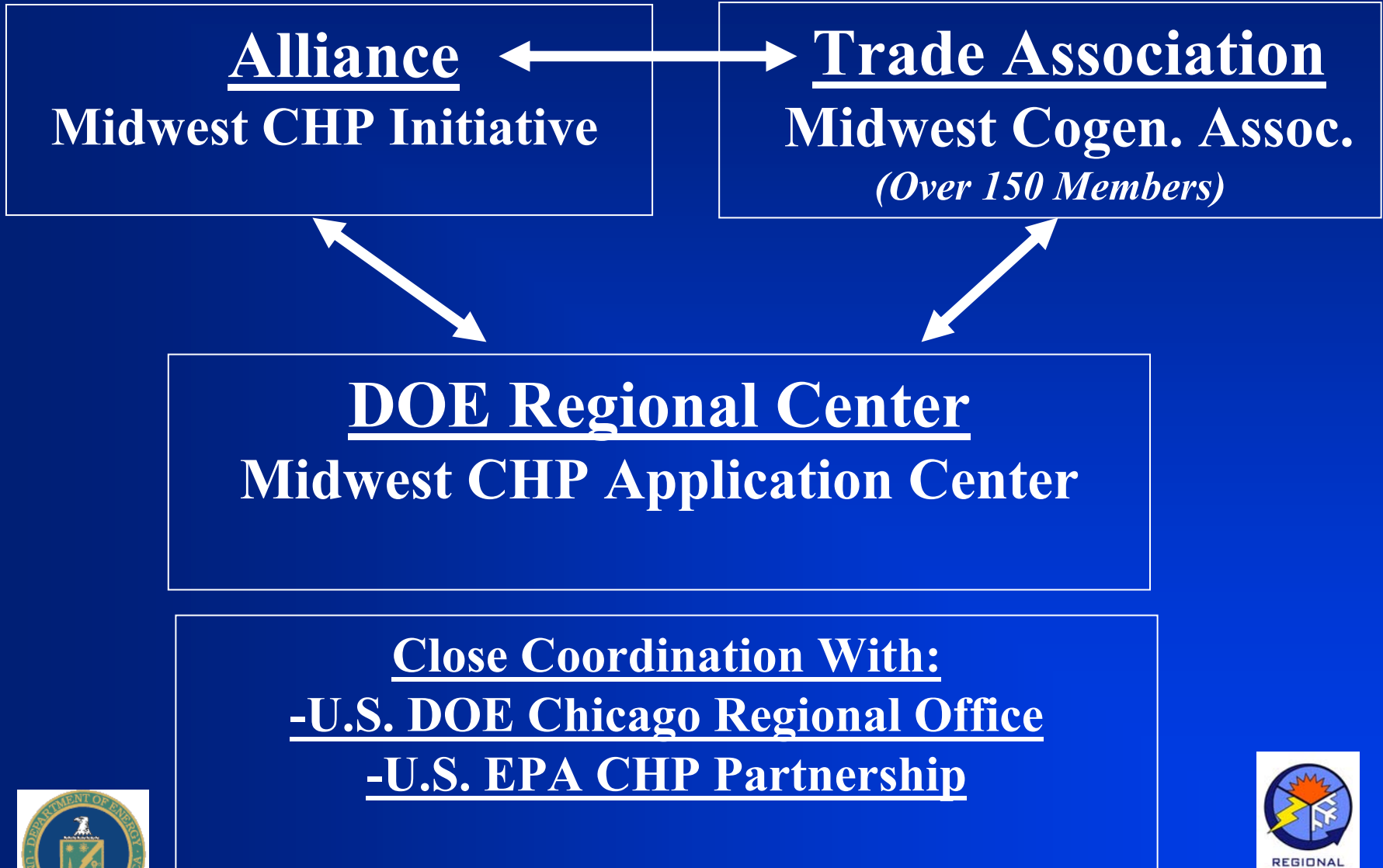


Midwest CHP Application Center

- **Center Focus Is Source of Unbiased**
 - **Information**
 - **Education**
 - **Technical Assistance**
- **Area of Service – 8 Midwest States**
 - **Illinois**
 - **Indiana**
 - **Iowa**
 - **Michigan**
 - **Minnesota**
 - **Missouri**
 - **Ohio**
 - **Wisconsin**



Working Together In The Midwest



Areas of Emphasis

- **Year #1**

- **Get Ourselves Known**
- **Establish A Good Reputation**
- **Perform Baseline Assessments & Initial Case Studies**

- **Year #2**

- **Establish a Technical Assistance Program**
- **State Commission Interaction**
- **Targeted Education (Hospitals)**
- **Expand Funding Base (New Sponsors)**



Services Offered

- **Website (Available & Updated)**
- **Site Evaluations (Screening)**
- **Application Analysis (Tech / Financial)**
- **Technical Assistance**
- **Training**
- **Workshops / Conferences**
- **Regulatory Interactions**



Accomplishments

- **Regulatory**

- **Interconnect Workshop**
- **Tariff Workshop**
- **Commerce / Utility Commission Interactions**
- **Four of Eight States Have Interconnect Standards In Place / In Process**

- **Technical Assistance**

- **Potential Installations - > 100 MW**
- **Engineering Firms Targeted**



Accomplishments

- **Education / Information**
 - **Website --- 35,000 hits / month**
 - **Training Courses / CHP Primer**
 - **CHP Site Walkthrough Screening Guide**
 - **Environmental Permitting Guidebook**
 - **CHP Resource Guidebook**
 - **Data Bases**
 - » **Case Studies**
 - » **CHP Installations**
 - **Hospital / Healthcare Targeted Market**



Regional CHP Application Center Expansion

- **Issued Solicitation in early 2003 to develop new Regional CHP Application Centers with focus on**
 - **Education and Outreach (baseline assessments, case studies, outreach information, website development, coalition building)**
 - **Identification and Facilitation of High Impact Projects**
- **Five new Centers Selected in August '03**

Intermountain	Northwest
Mid-Atlantic	Pacific
Northeast	



Intermountain Regional CHP Application Center

States

- **Arizona**
- **Colorado**
- **New Mexico**
- **Utah**
- **Wyoming**

Key Partners

- **etc. Group**
- **Southwest Energy Efficiency Project (SWEET)**

Strengths

- **Ties to EE and IOF Programs**



Mid-Atlantic Regional CHP Application Center

States

- Delaware
- Maryland
- New Jersey
- Pennsylvania
- Virginia

Key Partners

- University of Maryland
- Rutgers University

Strengths

- Md CHP Lab
- Rutgers IAC Leader
- Strong support MD SEO



Northeast Regional CHP Application Center

States

- **Connecticut**
- **Maine**
- **Massachusetts**
- **New Hampshire**
- **New York**
- **Rhode Island**
- **Vermont**

Key Partners

- **University of Massachusetts – Amherst**
- **Pace University**
- **NYSERDA**

Strengths

- **Strong Initiative**
- **UMass – Projects; Pace – Policy (Good split on skill sets)**
- **IACs in NE part of proposal**
- **SEO Advisory Council**



Northwest Regional CHP Application Center

States

- **Alaska**
- **Idaho**
- **Oregon**
- **Montana**
- **Washington**

Key Partners

- **Washington State University (Lead)- operates Washington State Energy Office**
- **State Energy Offices of all Participating States**

Strengths

- **Senior, Exp. Staff**
- **Strong Initiative**
- **Involved since '99**
- **SEOs part of proposal and workscope**



Pacific Regional CHP Application Center

States

- **California**
- **Hawaii**
- **Nevada**
- **Pacific Territories**

Key Partners

- **San Diego State University**
- **University of California at Berkeley**
- **University of California at Irvine**
- **California Energy Commission**

Strengths

- **Strong Partnership among equals- all engaged in DE/CHP activities**
- **Clear delineation of project responsibilities**



Southeast Regional CHP Application Center - ????

States

- Florida-?
- Georgia-?
- Mississippi-?
- Alabama-?
- North Carolina - ?
- South Carolina - ?
- Kentucky - ?
- Tennessee- ?
- Louisiana - ???

Key Partners

- Can SE pull together a team of strategic partners, delineate work between them, and gain support of multiple states???

Strengths

- Strong Initiative and RO Support
- Key activities taking place in major universities
- Can lead in building case for Reliability needs and Cooling Projects
- IACs
- Others????



For Further Information

- **Regional CHP Center Coordination Activities**

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